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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09 807,721	04 18 2001	Henry Daniell	1463- PCT-US-00	4041

7500 09 10 2002  
Schnader Harrison Segal & Lewis  
IP Department  
36th Floor  
1600 Market Street  
Philadelphia, PA 19103

EXAMINER

KUBELIK, ANNE R

ART UNIT	PAPER NUMBER
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1638

DATE MAILED: 09 10 2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/807,721

Applicant(s)

DANIELL ET AL.

Examiner

Anne Kublik

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 18 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) 1-52 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 1638

***Election/Restrictions***

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions that are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-7 and 28-33, drawn to a plastid transformation vector comprising a 5' plastid DNA sequence, a plastid promoter, a selectable marker sequence, a sequence encoding a single-chain variable fragment, a transcription termination region, and a 3' plastid DNA sequence, and a method for transforming plants with the vector.

Group II, claim(s) 1, 8-11, 28, 34-36 and 41-45, drawn to a plastid transformation vector comprising a 5' plastid DNA sequence, a plastid promoter, a selectable marker sequence, a sequence encoding a secretory immunoglobulin, a transcription termination region, and a 3' plastid DNA sequence, and a method for transforming plants with the vector.

Group III, claim(s) 12, drawn to plastid transformation vector pLD.

Group IV, claim(s) 13-17 and 22-27, drawn to a composition comprising plant material and an immunoglobulin.

Group V, claim(s) 18-21, drawn to a plastid comprising a DNA encoding a immunoglobulin in the form of a polypeptide multimer, and plants comprising the plastid.

Group VI, claim(s) 37-40 and 47-49, drawn to plastid transformation vector comprising more than one immunoglobulin coding sequence, and plants transformed with the vector.

Group VII, claim(s) 46, drawn to plastid transformation vector pZS.

Art Unit: 1638

Group VIII, claim(s) 50-52, drawn to a universal plastid transformation vector comprising a 5' plastid spacer sequence, a plastid promoter, a selectable marker sequence, a sequence encoding an immunoglobulin, a transcription termination region, a 3' plastid spacer sequence, and flanking sequences, and plants transformed with the vector.

The inventions listed as Groups I-VIII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: These groups fail to share a special technical feature.

The technical feature shared by the Groups is plastid transformation vectors encoding immunoglobulins. Mayfield et al (WO 98/31823, cited in the PCT search report) teaches this technical feature. Mayfield et al teach plastid transformation vectors comprising a dimeric IgA gene or a recombinant single chain antibody to tetanus toxin. These vectors have 5' and 3' flanking regions, the psbA promoter, 5' untranslated region and transcription termination region, and a selectable marker sequence (Fig. 11; pg 77, lines 6-14; pg 65, lines 15-23). Thus, Mayfield et al renders claim 1, among others, not novel. The technical feature linking the groups is therefore not special and the Groups are not so linked under PCT Rule 13.1.

The different plastid transformation vectors of the different Groups have different components and are thus not coextensive.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Art Unit: 1638

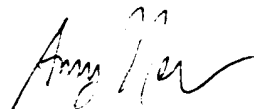
Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne R. Kubelik, whose telephone number is (703) 308-5059. The examiner can normally be reached Monday through Friday, 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson, can be reached at (703) 306-3218. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9307 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the patent analyst, Kimberly Davis, at (703) 305-3015.

Anne R. Kubelik, Ph.D.  
September 4, 2002



AMY J. NELSON, PH.D  
SUPERVISORY PATENT EXAMINER  
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